BIOLOGICAL INTELLIGENCE REVIEW

Deadlines, Strategy, Resources

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A REPORT BY THE AFRICAN INTELLIGENCE NETWORK WORKING GROUP

JULY 2025

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DISCLAIMER

The Critical Reading Group did not make a prediction during our tabletop exercise. The exercise served to highlight preparedness and response challenges that would likely arise in a very severe predictive programing attack. Generative Artificial Intelligence was used in this publication. All content, including AI-generated elements, has been thoroughly reviewed to ensure accuracy and relevance.

ACKNOWLEDGEMENTS

The July 2025 *Biological Intelligence Review* tabletop exercise was held in real-time, with the world's geopolitical context at that time as a backdrop. The inputs experts used for modeling the potential impact were fictional. It was organised by the Critical Reading Group (CRG), professionals who meet to discuss current events. The group originated in the Millennium Book Club and consists of a changing alliance of participants committed to the exchange of views and interpretations. Participation is on an *ad hoc* basis and deliberations are confidential.

This fictional threat awareness training exercise review was initiated as part of the Project Liberation report on the legacy of the South African Education White Paper 3: Programme for the Transformation of Higher Education (July, 1997). Participants were tasked with exploring their own contribution towards the White Paper's goal of 'contributing to the socialisation of enlightened, responsible and constructively critical citizens.' In the light of recent events to what degree have we encouraged 'the development of a reflective capacity and willingness to review and renew prevailing ideas, policies and practices based on the common good'?

PREFACE

The aim of this performance review is to assess weaknesses and suggest actionable ways to strengthen preparedness and resilience: Inventive Thought into Action (ITA). This fictional scenario was designed with impending biological threats in mind. While such events are not inevitable, history shows that lack of preparation can be fatal. Deadly impacts can be minimized by anticipation and analysis; by contemplating contingencies of the future.[1] Lessons learned must be clarified and the mechanisms of the deadly outbreak grasped to minimize the deadly toll.

Fractionated intellectual activities remain insufficient to meet and overcome many biological threats to our people. This failure to adequately prepare for attack resulted in a devastating loss of confidence. On some occasions this was a rational reaction. However, demoralization can be fatal and is an outcome aimed at by our enemies. Indeed, those tirelessly working to that end are relentless and determined. For the purposes of this simulation intelligence our understanding of intelligence accords with the current consensus expressed in the following definition:

> A very general capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly, and learn from experience.[2]

Despite having made some progress, we remain dangerously vulnerable to a biological intelligence attack.

Threat analysis aims to bolster resilience at the conceptual and behavioral levels. Changing our biodefense cadence from off-again/on-again to on all the time required that we demystify how and why we have reached crisis point. Past responses will not suffice as models of interpretation and action. Emerging and reemerging threats will not be successfully defeated by hasty attempts to shore up vulnerability in one place that only lead to many others. Only a focused approach based on unflinching recognition of past mis-judgements and their possible remedy can provide foresight. Without effective navigation authority runs aground.

Confronting a worst-case scenario provides coordinates for framing catastrophic events. Piercing contradictions, denials, dogmatic decrees, and perfidy that cloud biological judgement. As the President of the Rockefeller Foundation observed:

> One important—and novel—component of our strategy toolkit is scenario planning, a process of creating narratives about the future based on factors likely to affect a particular set of challenges and opportunities. We believe that scenario planning has great potential for use in philanthropy to identify unique interventions, simulate and rehearse important decisions that could have profound implications, and highlight previously undiscovered areas of connection and intersection. Most important, by providing a methodological structure that helps us focus on what we don't know—instead of what we already know—scenario planning allows us to achieve impact more effectively. (*Scenarios for the Future of Technology and International Development*)[3]

In the era of show trials and keyword tracking designed to elicit trust, discernment and interpretation are battle gear. Stories are weapons. The target of propaganda is capacity to judge. Accepting that we are under attack and must respond accordingly is challenging in the face of concerted misdirection and deflection. Close attention to words and deeds, past and present, reveals patterns that can guide us. Intellectual readiness and biological security depend on awareness. In the wake of terrorist attacks on our security and well-being it is time to take stock of the field of engagement. When the battle-field is your mind, it is essential to identify strengths and weaknesses. The ordnance of psychological warfare must be sifted and categorized into its various components. In the war of nerves, perception is the first line of defense.[4] We must immunize against despair.

The following imaginative reenactment establishes lines of communication and sketches the outline of a blueprint for resistance. As both timely reminder and actionable defense review, the aim is to map the breadth and severity of biological threats. To be on the same page means seeing through the clutter of misinformation and self-deception. Biological intelligence as

countermeasure scale-up means knowing the difference between friend and enemy—and sensing the continuous mutations in between. We are all warfighters now.

INTRODUCTION

In early 2025, a meeting of the African Intelligence Network Working Group convened to address the topic of progress so far. Under the project heading *Biological Intelligence Review* participants gathered virtually to discuss the texts provided. These were circulated two weeks prior to meeting. Various roles were assigned and these formed the basis for the discussion. Participants were requested to situate goals and capacities within the following framework of key questions designed to guide, but not determine, critical thinking:

Key Questions

- What is the most appropriate definition of biological risk?
- What rules govern the artefacts of future history?
- What rules govern the performance of future history
- What is ‘state of emergency’?
- What is a survivor in the current context?
- Who is a perpetrator (be specific)?
- What is the distinction between indifference and complicity?
- Are you a bystander or a collaborator?
- What is sovereign immunity?
- What is ‘war by stealth’?
- What is a snake in the grass?
- What is an intellectual?
- Can there be truth in fiction?
- Is appearance reality?
- Do nations matter?
- Are we proud of who we are?
- What is your definition of a pandemic?
- What is time in this context?

- What is a countermeasure?

These questions should in turn be situated within the high-level cross-cutting problem of interpretation:

- When does conjunction amount to causality? When does relation, correspondence, correlation amount to necessary link between origin, initiation, beginning, and result? Motive and action? Does causality mean evidence of physical contact (mechanical causality)? Or does it cover action over a distance, with no obvious physical interaction?

- If evidence is defined as facts, information (documents, testimony) that gives reason to believe something to be the case, what counts evidence of belief in reason? Pattern, repetition, rhythm invite predictability and the supposition of design. But when does coincidence become repetition? When does predictability suggest design?

- You have to see the coincidence before you can decide. And you can always choose not to see and so avoid having to choose. In which case, you have may some reason to avoid reasoning. What is it?

As the presentation unfolds, please keep in mind that, while the exercise scenario was based on the events that might follow a biological attack the exercise was designed to highlight the numerous complicated global challenges that would arise in the event of any large-scale attack.[5]

SCENARIO

The Biological Intelligence Exercise was part of a multi-discipline revaluation and skills audit program under the auspices of the Critical Reflection Initiative (CRI). The disaster simulation required participants to imagine a world in the grip of bioweapon attack.

One of the great challenges of our century is preventing the deliberate use of disease as a weapon for killing millions, destabilizing economies, and disrupting societies.

Despite the best efforts of authorities, the general population remains uncompliant. Waves of information and appeals to social responsibility have failed to move a recalcitrant minority (estimated at 30%, but still growing) in the right direction. In the teeth of the facts dissent is replicating unhindered.

Recently outbreaks of civil disruption have accompanied the mobilization of sections of the judiciary and law enforcement that have targeted key public figures. Summary executions have broken out in various metropolitan centers. Medical personnel have been attacked and facilities destroyed. Media facilities have been hijacked and insurrectionary broadcasts flood the airwaves.

Attempts to identify and isolate ringleaders have been largely unsuccessful. Designers, authors, and controllers hide in plain sight shielded by their victims' disbelief and incomprehension. A working hypothesis is that a covert, decentralized system of coordination is operative. Government and senior military leaders appear paralyzed. At present there appears to be a pause in the chaos intended to instill a sense of complacency in the target population.[6]

The situation is complicated because of a shortage of information and spread of misinformation. There is suspicion that we are in the midst of a psychological warfare operation designed to neutralize and disable. Documents and images are circulating on the Internet that instill fear and confusion. Widespread panic followed by robotic sectarianism impervious to reason and evidence remain the order of the day.

Meanwhile military countermeasures are being dispersed under the guise of medical countermeasures to a panicked public. Rumors are circulating to the effect that the health emergency has been hijacked by bad actors; a mock version of botched public health matters running cover for a murderous response to a faked military attack.

Fraudulent replicon texts designed to undermine legitimate authority are published. Intentions and goals are misrepresented, false proxies presented as performing social acts with authentic sincerity. In fact, these are a pseudo-performance, a pale, bloodless performing—the shadow next to the bodily thing. This amounts to more than words and images misused. The acts are performed but they are pseudo-performances that the performing subject tries to present as genuine. A genuine conviction cannot underlie a pseudo act. The adversaries here inhabit a

spreading sphere of social dishonesty and hypocrisy, falsely presenting themselves as *really* caring while hatching their conspiracies.

False analogies (colonialism, eugenics), visual cues and spurious genealogies mix with personal anecdote trading on the empathy of the audience. Well known imaginative techniques are employed to elicit feeling oneself into the mind of the other and into the relevant traits of his character and in this way feeling by sympathy the intention which the other would have. The disciple who lives according to the pattern of his master is not free in his experiencing. [7]

Contagious deception disguised as memoir or historical reflection is personalized propaganda. While mechanical metaphors and imagery nudge the compliant towards half-truths and distortions about technological advances, history is reduced to moral parable. Literary cliches invoking melancholia and remorse disarm critical thinking and instill morbid narcissism. Fictional portrayals of official bad actors inject distrust and misanthropic remorse. Effectively disarmed mentally, debilitated physically through anxiety and despair, the psychological operation achieves its goal. An epidemic of fraud turns a crisis into a catastrophe.

Since the whole human population is susceptible, during the initial months of the pandemic, the cumulative number of cases increases exponentially, doubling every week. And as the cases and deaths accumulate, the economic and societal consequences become increasingly severe. Beginning with no symptoms at time of exposure, passing through the super-infection stage, even survivors have scars for life and may be blind.

The great fear is that it is likely to be an endemic childhood disease and generations will become host to this parasitic entity.

With the pandemic blanketing the planet, false narratives circulate peddling alterative histories. A hodge-podge of plagiarized tropes are peddled depicting a near present in which a highly centralized global government has been replaced by a global federation of democratic nation states. Utopian fantasy serves as delivery mechanism for toxic complacency. While clinging to the past under the guise of preparing the future is an understandable response to crisis, it is dangerously unrealistic. This reactionary mind virus rewrites history to effectively erode public confidence and cohesion. False hope feeds complacency and weakens resistance. Maintaining immunity to such divisive tactics will be crucial to controlling the spread of disease.

To counter this biosecurity threat we have determined that the immediate objective must be to derail the predictive programming. Precedents and precursors for the ongoing operation must be identified, potential risks and dangers flagged. In this total war the enemy is seen as subhuman.[8]

To this end, experts convene online to counter the covert and overt war structure. The archive was consulted and the following exercises were presented in chronological order over a four-day period for ease of reference. The purpose of this mode of presentation is to reveal concepts and narratives that will be addressed in the Conclusion. Excerpts from the participants' discussions have been chosen specifically to convey the central themes that emerged in response to those challenges (see Appendix A).

(*Note to reader: The brief summaries presented here cover only the most schematic features of the selected threat scenarios. Follow the links to the full texts. Those familiar with the fictional canon can jump to the Conclusion and Appendix A Discussion Summary. Full texts were available to participants prior to the exercise.* For Confidentiality agreement see Appendix B)

Text 1

2001. *Dark Winter* (June 22-23) https://centerforhealthsecurity.org/our-work/tabletop-exercises/dark-winter-a-training-tabletop-exercise

> The Dark Winter exercise, held at Andrews AFB, Washington, DC, June 22-23, 2001, portrayed a fictional scenario depicting a covert smallpox attack on US citizens. The scenario is set in 3 successive National Security Council (NSC) meetings (Segments 1, 2 and 3) that take place over a period of 14 days. Former senior government officials played the roles of NSC members responding to the evolving epidemic; representatives

> from the media were among the observers of these mock NSC meetings and played journalists during the scenario's press conferences. (*Dark Winter*)

One of the funding organizations for the exercise was the Memorial Institute for the Prevention of Terrorism (MIPT), a non-profit organization founded in response to the 1995 Oklahoma City bombing.

A key finding of the exercise was:

> Dealing with the media will be a major immediate challenge for all levels of government. Information management and communication (e.g., dealing with the press effectively, communication with citizens, maintaining the information flows necessary for command and control at all institutional levels) will be a critical element in crisis/consequence management.

In the wake of the 9/11 attacks the Subcommittee on Emerging Threats and Capabilities of the Committee on Armed Services held a hearing entitled *The Dark Winter Scenario and Bioterrorism* (October 25, 2001). For the committee, the September attack 9/11 confirmed the premiss of the Dark Winter exercise:

The Chairman of the Subcommittee interpreted the Dark Winter scenario as prescient:

> We preceded this open session with a very brief presentation called Dark Winter. It was, indeed, riveting and instructive, and very timely. I would like to give the well-orchestrated Dark Winter exercise a bit more context. There is a perception in this country that the biological attack that we are currently under is unprecedented, unpredicted, and unparalleled. While these attacks represent a new kind of war for America, they have precedence throughout human history.
>
> The great Chinese strategist Sun Tzu is well-known to many members of this subcommittee, and no doubt to our witnesses. One of his famous dictums on strategy is: "The supreme act of war is to subdue the enemy without fighting." (*The Dark Winter Scenario and Bioterrorism*

With 9/11 in mind, the focus was on bioterror attack:

> The timing of this exercise [Dark Winter] comes almost 90 days before the real biological attacks, now using anthrax. It appears to have foreshadowed this event. At that time, no one imagined that we would be facing a biological weapon terrorist attack right here in the United States Senate and elsewhere in the Nation, using the U.S. Postal Service as the means of delivery.

The Chairman is referring to the anthrax spores sent in four letters through the U.S. Postal Service.[9] The first letter was sent one week after 9/11:

> Now all Americans understand how important it is to think through and plan ahead for such once unthinkable contingencies. We are living through one today.

Concern with smallpox as a bioweapon continued.[10] 2002–2004 saw the outbreak of SARS, caused by severe acute respiratory syndrome coronavirus (SARS-CoV or SARS-CoV-1), infected over 8,000 people from 30 countries and territories. The outbreak was first identified in Guangdong, China, in November 2002.[11] Avian flu forms a backdrop to the various outbreaks.[12]

Text 2

2005. ***Atlantic Storm*** (January 14) https://centerforhealthsecurity.org/our-work/tabletop-exercises/atlantic-storm-a-tabletop-exercise

U.S. ministerial tabletop exercise convened on January 14, 2005 by the Center for Biosecurity of the University of Pittsburgh Medical Center, the Center for Transatlantic Relations of the Johns Hopkins University, and the Transatlantic Biosecurity Network. The exercise focused on responding to a smallpox bioterrorist attack.

2005 saw the outbreak of Bird Flu (H5N1) in Vietnam (January), and the release of the documentaries *Avian Flu: Contagious* (April) and *The Coming Pandemic* (Nov. 3), both by Journeyman Pictures.[13] 2009 saw the detection of a new strain of Swine Flu (H1N1) in the United States.

Text 3

2010. *Scenarios for the Future of Technology and International Development*. (aka *Operation Lock Step*) (published May). https://archive.org/details/scenarios-for-the-future-of-technology-and-international-development-rockefeller-foundation-2010

Organised by the Rockefeller Foundation and Global Business Network, this scenario planning exercise posited a 2012 Avian flu outbreak originating from wild geese.

The phrase ‘lock step’ appear in this document to describe one mode of reaction to pandemic crisis:

> LOCK STEP—A world of tighter top-down government control and more authoritarian leadership, with limited innovation and growing citizen pushback ….

> The United States’s initial policy of “strongly discouraging” citizens from flying proved deadly in its leniency, accelerating the spread of the virus not just within the U.S. but across borders. However, a few countries did fare better—China in particular. The Chinese government’s quick imposition and enforcement of mandatory quarantine for all citizens, as well as its instant and near-hermetic sealing off of all borders, saved millions of lives, stopping the spread of the virus far earlier than in other countries and enabling a swifter postpandemic recovery. (*Scenarios for the Future of Technology and International Development*, p.18)

March 31, 2013, avian influenza H7N9 was detected in China. December 6 2013, a 73 year old woman infected with H10N8 dies. January 8, 2014, H5N1 infected person dies in Canada. 2014-2016 Ebola outbreak in West Africa, and cases in Dallas, Texas.

Text 4

2018. *Clade X* (May 15)
https://archive.org/details/CladeXPandemicExerciseSegment/Clade+X+Pandemic+Exercise+Segment+1.mp4

The Johns Hopkins Center for Health Security hosted the Clade X pandemic tabletop exercise on May 15, 2018, in Washington, DC. The hypothetical pandemic consisted of a hybrid highly contagious human parainfluenza virus and the deadly Nipah virus.

Text 5

2019. *Crimson Contagion* (January to August) https://int.nyt.com/data/documenthelper/6824-2019-10-key-findings-and-after/05bd797500ea55be0724/optimized/full.pdf

U.S. biosecurity exercise code named *Crimson Contagion* was organized by the Department of Health and Human Services (HHS) and the US Department of Homeland Security (DHS) as well as Federal Emergency Management Agency (FEMA). It was a series of simulation exercises that ran from January to August 2019, involving Washington and twelve states including Illinois and New York. During those exercises the HHS asked its federal and local partners to imagine a fictional scenario where a global influenza pandemic breaks out in China.

> The culminating event of the Series—the Crimson Contagion 2019 Functional Exercise—was a four-day, multi-state, and multi-regional exercise that focused on whole-of-community response and policy issues of workforce viability; critical infrastructure protection; economic impact; social distancing; scarce resource allocation; prioritization of vaccines and other countermeasures; available (or potentially available) funding streams or mechanisms to fund the response; and medical surge operations …. On each day of the Crimson Contagion 2019 Functional Exercise, participating federal organizations examined and tested capabilities related to that day's and the previous days' overarching federal focus areas. (*Crimson Contagion*, p.5)

On February 14, 2019, the Nuclear Threat Initiative (NTI) and its partners from Georgetown University and the Center for Global Development convene a tabletop exercise with the goal of making recommendations to improve the global system for responding to a global biological events: 'this particular scenario highlighted the catastrophic potential of a genetically modified agent resistant to available medical treatment' (NTI).

March 11, 2019. The United Nations announces global influenza strategy to prevent the "real" threat of pandemic (UN).

Text 6

2019. *Event 201 Pandemic Exercise* (October 18) https://centerforhealthsecurity.org/our-work/tabletop-exercises/event-201-pandemic-tabletop-exercise#scenario

Hosted by The Johns Hopkins Center for Health Security in partnership with the World Economic Forum and the Bill and Melinda Gates Foundation on October 18, 2019, Event 201 premiered in New York.

> Event 201 simulates an outbreak of a novel zoonotic coronavirus transmitted from bats to pigs to people that eventually becomes efficiently transmissible from person to person, leading to a severe pandemic. The pathogen and the disease it causes are modeled largely on SARS, but it is more transmissible in the community setting by people with mild symptoms.
>
> The disease starts in pig farms in Brazil, quietly and slowly at first, but then it starts to spread more rapidly in healthcare settings. When it starts to spread efficiently from person to person in the low-income, densely packed neighborhoods of some of the megacities in South America, the epidemic explodes. It is first exported by air travel to Portugal, the United States, and China and then to many other countries. Although at first some countries are able to control it, it continues to spread and be reintroduced, and eventually no country can maintain control.
>
> There is no possibility of a vaccine being available in the first year. There is a fictional antiviral drug that can help the sick but not significantly limit spread of the disease. (*Event 201*)

Late December 2019 SARS-CoV-2, which causes the disease known as COVID-19, identified in Wuhan, China. January 30, 2020, World Health Organization declares COVID-19 a Public Health Emergency of International Concern.[14]

Text 7

2024. ***National Blueprint for Biodefense. Immediate Action Needed to Defend Against Biological Threats. A Report of the Bipartisan Commission on Biodefense***. (April)

https://biodefensecommission.org/reports/the-national-blueprint-for-biodefense/

The Bipartisan Commission on Biodefense (formerly Blue Ribbon Study Panel on Biodefense, established in 2014) posits the release of 'Nipha virus':

> Nine weeks ago, some nation or terrorist group—we still do not know who—attacked the Nation's Capital and other US cities with biological weapons as we celebrated Independence Day. The infectious agent they used killed at least 280,000 Americans and infected at least 400,000 throughout the country in a single day, in addition to the

> 200,000 dead and 800,000 sickened animals. These numbers will increase as the disease spreads …. The virus, which in nature does not spread easily among people, was genetically modified to increase its ability to spread from animal-to-animal, animal-to-person, and person-to-person, while still retaining a mortality rate of over 40%. (*National Blueprint for Biodefense*, p.3)

The sub-title for the table-top scenario is: *Joint Inquiry into Administration and Congressional Actions Before and During the Bioterrorist Attacks of July 4, 2025*:

> The scenario describes how a biological agent could target humans and animals, how it could emerge, some of the key interagency capabilities required to address the agent and its impacts, and the consequences of failure. (p.3)

The *Joint Inquiry* is written from a fictional present after the bioterrorist attacks of July 4, 2025 that had a mortality rate of over 40%. How far after July, 2025 is left indeterminate: 'Animals and people were sick for more than a month before we realized what had happened' (p.4).

The keystone of the scenario is the assumption of consensus regarding 9/11, anthrax attacks, and COVID-19:

> As we all seek to turn the page on COVID-19, policymakers risk losing the progress made over the last three years. Our Nation can no longer wait for a biological event to occur and only then respond to it, expending enormous resources because we did not invest in biodefense. America must change its biodefense cadence from on-again/off-again to on all the time. Inevitably, there will be some subsequent pandemics and other biological events that will be worse than COVID-19, and similar responses will not suffice if we hope to save lives, preserve our economic strength, and buttress national security. (p.1)

The call to action mobilises an elegiac tone:

> Sadly, much as the 9/11 Commission observed in its analysis of the attacks of 2001, the attacks of 2024 can be ascribed to failures to heed many warnings and commit to preventing biological events from affecting our national security. (p.4)

The cumulative, increasing temp of attacks and emergencies are portents of disasters to come:

> Following the anthrax attacks of 2001 (which killed 5 Americans and sickened 17), several devastating biological events occurred leading up to the COVID-19 pandemic. The SARS-CoV-1 epidemic in 2002 resulted in 774 deaths. The world faced the H1N1 influenza pandemic in 2009 that resulted in at least 284,000 deaths worldwide. While the H1N1 pandemic did not turn out to be as deadly as initially feared, it was a stress test for the world on managing an infectious respiratory pathogen. Shortly thereafter, MERS-CoV emerged in 2012 bearing responsibility for at least 937 deaths to date, and continuing to cause illnesses. Then there were the Ebola outbreaks in West Africa from

> 2014–2016 causing 11,300 deaths and global panic due to its high morbidity and mortality rates. The Zika virus challenged the world in 2016, that caused thousands of cases of microcephaly in infants and lifelong sickness that will continue to be a long-term problem. While these are some of the most well-known infectious disease events to occur between 2001 and 2020, we must not forget that seasonal influenza kills 400,000 people worldwide on average annually. This means that in addition to the many lives lost from these more notable events, the world has lost around 7.6 million lives due to influenza alone in the 18 years between the anthrax attacks and the emergence of COVID-19. (p.24)

Mistakes have been made, but policy is moving in the right direction:

> The White House launched the Nation's environmental biodetection program, BioWatch, in 2003. BioWatch is a DHS system of nationally distributed detectors that sample the air for a select number of pathogens in a few dozen cities. Non-federal public health laboratories then analyze the samples. Its potential remains unrealized 20 years later. As of 2023, BioWatch uses the same technology (i.e., manual filter collection and laboratory polymerase chain reaction testing) as it did at its inception. The technological limitations of the system include (1) reliance on winds blowing in optimal directions [….] (p.114)

And in conclusion:

> The world stands in a partial state of vigilance, reeling from COVID-19, struggling with Mpox, fighting malaria and other seemingly old diseases, discovering new emerging diseases only after illnesses occur, and acknowledging the possibility of biological terrorism and warfare, while simultaneously wanting nothing more than to rest as a result. While there is no rest for the weary in this arena, there is hope. By implementing this National Blueprint for Biodefense, America can once again rise to the challenge and save lives. It's not over. (p.146)

As the subtitle to the report puts it: "Immediate Action Needed to Defend Against Biological Threats".

The Blueprint was closely followed by *Proposed Congressional Hearings on the Recommendations of the 2024 National Blueprint for Biodefence* (May, 2024). In this document 'scenarios' (p.39; p.46) are no longer fictional. 'What lessons can we take from the response to Ebola, COVID, and Mpox?' (p.4) The crisis is here, the threat is real. The subtitle of the proposal declares: "WE ARE STILL DANGEROUSLY UNPREPARED"

As the logo of the Bipartisan Commission on Biodefense website declares, "It's not over…":

https://biodefensecommission.org/

Text 8

2025. *Battle Rattle: Fast Movers for Military Biodefense. A Report of the Bipartisan Commission on Biodefense*. (May) https://biodefensecommission.org/wp-content/uploads/2025/04/Battle_Rattle_final_digital-1.pdf

This report of the Bipartisan Commission on Biodefense takes up the theme of the 2024 *National Blueprint for Biodefense*. Biological attack is imminent and preparedness is inadequate. And this time the imperative mode obliterates the hypothetical and the fictional framing device of the scenario format. ('Battle rattle' is WW2 slang for full combat gear.)

As background, the text offers a recapitulation of bioterrorism measures and organisations with 'the national response to COVID-19' (p.3) serving as an example failure to confront a biological attack. Key here is the military response:

> The DOD National Center for Medical Intelligence may have been among the first federal agencies to identify COVID-19 as a potential threat to the United States…. The COVID-19 pandemic made DOD rethink its approach to addressing biological threats to the warfighter. Rather than an attack from an adversary, a naturally occurring biological event impacted military readiness. (pp.7-p.8)

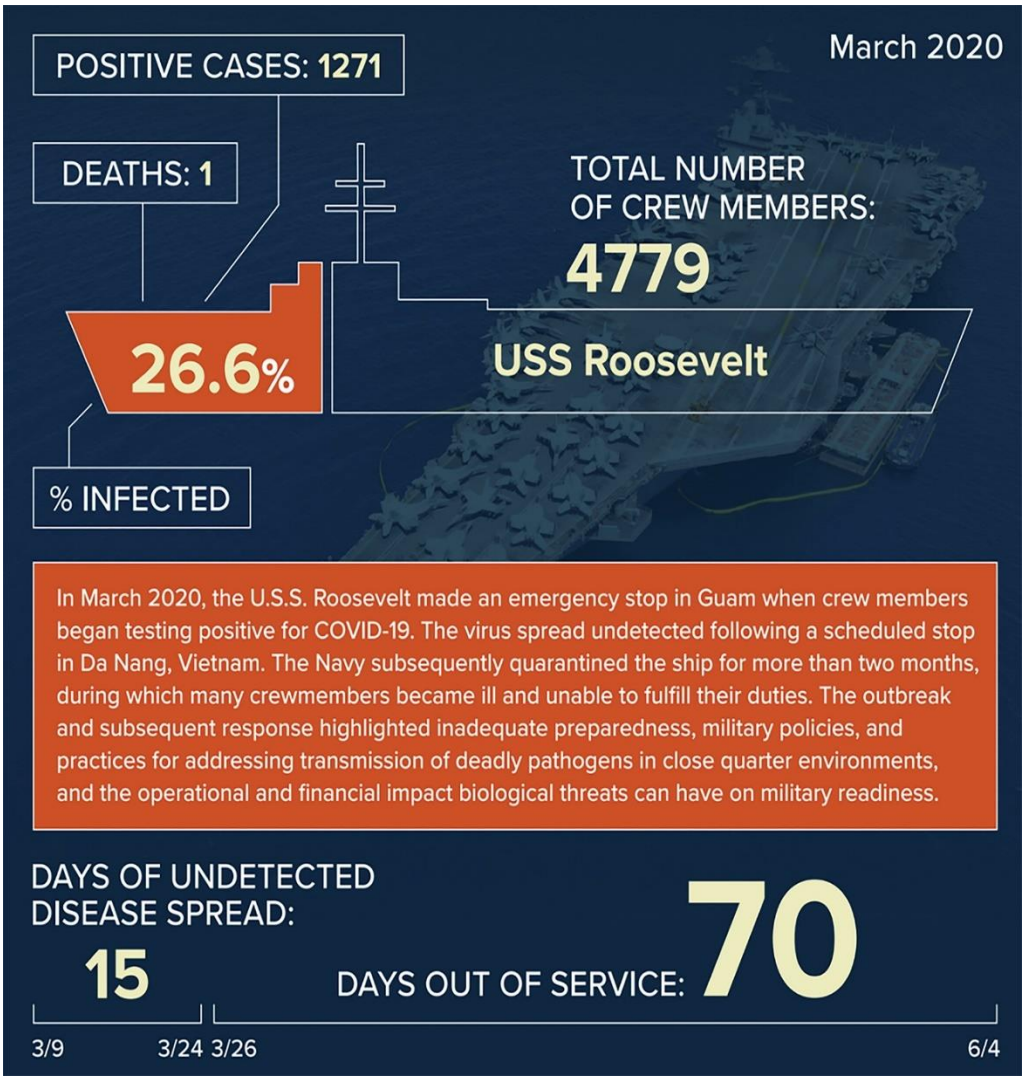
Emphasis is now on the 'warfighter'. The war scenario is now present tense operational imperative:

> During recent biological events, including the COVID-19 pandemic and recent outbreaks of mpox [sic.], DTRA [Defense Threat Reduction Agency] developed innovative solutions to address the needs of US military personnel and civilians. (p.12)

Lessons learned must now be applied. The fundamental premiss of the logic of biological threat preparedness is the 2020 USS Theodore Roosevelt COVID-19 outbreak:

> In March 2020, the U.S.S. Roosevelt made an emergency stop in Guam when crew members began testing positive for COVID-19. The virus spread undetected following a scheduled stop in Da Nang, Vietnam. The Navy subsequently quarantined the ship for more than two months, during which many crewmembers became ill and unable to fulfill their duties. The outbreak and subsequent response highlighted inadequate preparedness, military policies, and practices for addressing transmission of deadly pathogens in close quarter environments, and the operational and financial impact biological threats can have on military readiness. (p.2)

Key information is presented in the following visual:


POSITIVE CASES: 1271
March 2020
DEATHS: 1
TOTAL NUMBER OF CREW MEMBERS:
4779
26.6%
USS Roosevelt
% INFECTED
In March 2020, the U.S.S. Roosevelt made an emergency stop in Guam when crew members began testing positive for COVID-19. The virus spread undetected following a scheduled stop in Da Nang, Vietnam. The Navy subsequently quarantined the ship for more than two months, during which many crewmembers became ill and unable to fulfill their duties. The outbreak and subsequent response highlighted inadequate preparedness, military policies, and practices for addressing transmission of deadly pathogens in close quarter environments, and the operational and financial impact biological threats can have on military readiness.
DAYS OF UNDETECTED DISEASE SPREAD:
15
DAYS OUT OF SERVICE:
70
3/9
3/24 3/26
6/4

(*Battle Rattle* (detail), p.2)

The reference for this data on the U.S.S. Roosevelt episode is ‘Lagrone, S. (2020)’. Unfortunately, the U.S. Naval Institute News Site shows ‘Page Not Found’.[15]

The solution proposed by *Battle Rattle* involves extending military authority on a global scale:

> The Secretary [of Defense] should also provide DTRA [Defense Threat Reduction Agency] with global authority to support development of biodefense capabilities and capacities in allied countries, subject to review and input on an as-needed basis by Department leadership and the relevant combatant commands. (p.12)

The concluding peroration underlines the combative sense of urgency:

> **We can and must reduce biological risk to our military immediately**. By implementing this plan immediately, we can ensure our warfighters have the battle rattle to fight and win against biological threats. (p.16)

CONCLUSION

Foreshortening of the fictional time-scape down to one year (*National Blueprint for Biodefense*, 2024) and then to the present (*Battle Rattle*, 2025) effectively breaks the fictional frame. The usual flash-forward, proleptic modality of anticipation and foreshadowing, combined explicitly with the prophetic mode of redemptive reflection, now reveals the pressure of a timeline dominated by imminence. We must act on these warnings now. The measures have already been announced, but not yet acted upon. In this knot of *already* and *not yet* lies the charge of complacency.[16]

The temporal schema of previous scenarios is compressed from years ahead to the more immediate future. The prophylactic fiction is dropped in favor of blunt forensic examination of the near future as if it were past. This is what will have been if our advice is not followed. The urgency of the proposed measures is no longer open to debate: the lessons (of 9/11, of COVID, etc.) are indisputable and the corrective measures clear.

APPENDIX A

Discussion Summary with Explanatory Notes

but does 2025 really mark a convergence, an acceleration toward the immediate present? And your presentation missed the ‘mammothpox’ exercise of April 2025 that still looks to a future.

you mean “Exercise Polaris”?[17]

yes, another fictional scenario. And what about the DARPA “Advanced Disease Outbreaks Simulation Capabilities” of June?[18]

and the UK’s “Exercise Pegasus” planned for the coming autumn?[19]

more references dispersing the narrative!

indeed, but the temporal schema has not telescoped as you suggest. On the contrary, it seems business as normal. You are reaching for your own denouement.

but the signature tempo is undeniable

at most perhaps an incidental intensification[20]

and the names? Pegasus the carrier of Zeus's thunderbolts. Birthed from Medusa. Polaris—polarization. Threat or a promise?

are you not over-interpreting again?

facts are facts. Consider one of the sponsors of National Blueprint for Biodefense: 'We are grateful for the support of our donors and that of Hudson Institute, which serves as our fiscal sponsor' (BNN, Acknowledgements).

well, that explains the Cold War genealogy of the scenario genre.[21] Changing mindsets, formulating strategies; forecasting, future studies, and so on.

and did you know that one of the notable funders of the Hudson Institute is the Bill and Melinda Gates Foundation.

here we go—again!

to your mind mere coincidence, doubtless. Then let us take up your comment on genre. At the risk of being too literary, certain features of the scenarios we have looked at are notable. Firstly, the prophetic mode. A rhetorical mechanism puts everyday experience into a larger context. *Apocalypsis*: lifting off the veil. A prescription to change current behavior, to spur a reinterpretation of reality on the part of the audience. What is needed is a critical rhetorical analysis of such conjurations tracing ideological practices and literary means by which they are achieved.

you are thinking of the Preface to *National Blueprint for Biodefense*?

exordium, laying out the theme and establishing the credibility and authority (*ethos*) of the authors. Summoning up the memory of the dead

Pericles; *epitaphios logos*

links to the dedicatory escutcheon on the copyright page of *National Blueprint for Biodefense* commemorating the 'legacy in biodefense'[22] of Senator Joseph Leiberman's (1942-2024):

This National Blueprint is dedicated to
the memory and profound legacy of
Senator Joe Lieberman,
founding co-chair of the
Bipartisan Commission on Biodefense.
His tireless efforts made America
and the world safer.

[23]

minor tributary to the dominant elegiac trope of 9/11. Conspiracy theory consistently and insistently instrumentalized in a way that reveal, unveils the central device in these texts. The future is invoked to secure a narrative of the present. That narrative is political. *Epideictic* rhetoric, in which both praising and blaming foster and promote collective identification and shared unity (social cohesion)—and silence internal conflicts (*stasis*) capable of weakening the preparedness of polity to resist attack.[24] Minus the Cold War, that event is the linchpin securing the narrative of imminent threat. Scenarios perform the insistent securing of an interpretation of the 2001 attacks. Hermeneutic dogmatism cannot allow for any analysis of fundamental doctrine. One must distinguish between defense and attack, for the latter is invariably smuggled in under the cover of the former.[25] It is on this connection that I would claim that the veil has been lifted, presenting the opportunity for unmasking the ruses, traps, trickeries, and seductions of the engines of war. The presentiment of disaster replacing evidence and proof with analogy and obscurantism mobilises eschatological production in the cause of crypto-politics.

and is that not what you are peddling right now

dogmatic appeal to manifest obviousness combined with breath-taking omission of the entanglements of foreign and domestic policy reduced to the terms of moral parable us versus them, or more precisely them versus us? Perhaps. The ritualistic façade of evaluating the evidence, weighing probabilities and chances,[26] tacitly means not considering anything that could undermine the security and authority of the authorizing personnel. The scenario that matters is not the future scenario which is by definition hypothetical (but no less certain for all that) but rather the entrenching of fundamental pre-text. An essential schema is set in place, a conceptual mechanism, to police and enforce partisanship

including your own bias hallucinating a guiding and coordinating intention to what is just the spectacular alignment of many different interests, however toxic

portentious rhetorico-temporal structure and political pathos; tried and trusted guardrails of conformity and complicity in the war of interpretations

and the same goes for resistance, solidarity, in the cause of justice, and so on

indeed both poison and antidote, that is why delineating the context in terms of forces and goals on each occasion is crucial—these missives are the performative-textual artifacts of multi-spectrum warfare marking out the friend/enemy positions in psychological strategy planned along the edge of nightmare.[27] Fear is the jewel on the lizard's head

which is a way of pre-emptively positioning any criticism of your own position as an attack, thereby utilizing the very logic you are claiming to uncover

such is the circular nature of the deployed; a feedback loop of vindication and pretext for defensive aggression so strained in a procedure so sure of itself, so strained in its certainty as if that guaranteed its authority; ‘straight faced to the point of parodic absurdity’, to borrow a phrase[28] combatting the spread of information

genre war of words (*logomachia*), genealogically traceable and knowable; enforced political narrative template, and visual lexicon of generic images shaping perception and interpretation—a regular Theory of Mind program.[29] Intelligence is a biological weapon

the form of the imaginative[30] scenario as speculation looks forward to a reward in the present in the form of a unitary authority, unanimous, self-identical. *Commissio*: an official order or authorized delegation of authority. Composite committee authorship, bipartisan yet partisan (country matters more than party), performs consensus and sovereign intention under the cover of collective responsibility.[31] Constructing a frame around current events and their interpretation shores up particular interests as general interest. A mimetological operation whose fragility is evident in insistent gestures papering over the gap in the frame that cannot be erased, only suppressed, ignored, and effectively silenced (censored). Question our analysis and you question our interpretation of recent events which we guard in honor of the dead. Whether or not this circumscription of thought and words is ineradicable from the idea of the nation, national community, or even community, is what must be determined. And before hastily dismissing appeals to national self-interest as horizon of interpretation one must explain the dynamic coupling in such mementos as ‘make America and the world safe’. The link to the universal parries the charge of selfish particularism, opening the interpretive frame to the question of others included in the protective framework. Or can one just impose making the world safe for democracy, aggressivity couched in terms of planetary philanthropic protection?[32] Does issuing resolute texts without reply, without any invitation to dialogue, or pretense of tentativeness, justifying hegemony on the basis of self-defense play that hand?

which is barely a question since it answers itself, for what else is power and the imperative to use it for what one presents as the greater good. Who is dissembling now, I would like to ask, and reading scenarios as allegories of imperial domination or better global internal colonialism shedding the skin of the nation state?

lest we forget foresight workshops as philosophical exercises that rehearse and synchronize concepts and narratives, entrench presuppositions required for coordinated action or inaction. Sensory (verbal, visual, auditory) cues.[33] The relics of an imagined future foreshortened to the present indicate an agenda, a deadline, indicative of military operation rather than public health events.[34] The fictional conceit of the future event serves as a disclaimer: this wasn't our plan, it just turned out to be an accurate prediction. Plausible deniability[35] is a structural feature of such aesthetic (*aesthetikos*: perceptible by the senses) production.

for war is (up to now) a biological event, the biological event is war; what has been called an activity of will that exerts itself 'against a living and reacting force'[36]

and biological intelligence is a matter of survival, learning from experience

which includes the experience of reading a sequence of politico-military texts. Spotting the dissimulation in the simulation camouflaging the attack is critical. To borrow another phrase and turn it against them: "WE ARE STILL DANGEROUSLY UNPREPARED".

APPENDIX B

No classified information is discussed in this report. All texts and references are in the public domain. Unclassified information that may have otherwise been useful to the discussion was not actually included if doing so would result in classified statements, particularly regarding the activities of the Intelligence Community. Discussions of the threat and of intelligence actions related to it are, therefore, necessarily high level and not highly specific. This Appendix is not part of the fictional scenario.

NOTES

[1] 'Contingencies of the Future …. refers to known experience. Short of turning to the field of futuristic fiction, it is impossible to provide discussion of situations which have not been known …. What should a small-unit commander do if his men thought they had been contaminated by airborne disease germs distributed by enemy bacteriological warfare planes? How should he act if his men were told by an enemy broadcast that they would be exposed to radiation which would cause anemia, cancer, or death—if they did not surrender immediately?' (Paul MA. Linebarger, *Psychological Warfare*. Washington: Infantry Journal Press, 1948, p.229. https://archive.org/details/psychologicalwar0000paul/page/n3/mode/2up

[2] Linda S. Gottfredson, "Mainstream Science on Intelligence." *Intelligence* 24, no. 1 (1997): pp.13-23, p.13. https://www1.udel.edu/educ/gottfredson/reprints/1997mainstream.pdf

[3] 'Thus, then, in Strategy everything is very simple, but not on that account very easy …. It may seem strange, but for all who know War in this respect it is in fact beyond doubt, that much more strength of will is required to make important decisions in Strategy than in tactics. In battle we are hurried on with the moment …. In Strategy, where all goes on at a slower rate, there is more room allowed for our own apprehensions and those of others, for objections and remonstrances, consequently also for unseasonable regrets; and as we do not see things in Strategy as we do at least half of them in tactics, with the living eye, but everything must be conjectured and assumed, the convictions produced are less powerful. (Carl von Clausewitz, *On War, volume 1*. Translated by Colonel J.J. Graham. London: Kegan Paul, Trench, Trubner and Co., 1908 [1832], p.168.

[4] 'Psychological warfare is waged before, during, and after war; it is not waged against the opposing psychological warfare operators; it is not controlled by the laws, usages, and customs of war; and it cannot be defined in terms of terrain, order of battle, or named engagements. It is a continuous process. Success or failure is often known only months or years after the execution of the operation. Yet success, though in calculable, can be overwhelming; and failure, though undetectable, can be mortal.' (Linebarger, *Psychological Warfare*, p.1)

[5] 'The enemy often avoids identifying himself in psychological warfare; much of the time, he is disguised as the voice of home, of God, of the church, of the friendly press.' (Linebarger, *Psychological Warfare*, p.1)

[6] 'Each step of aggression will be compensated by the illusory offer of a final settlement which, if accepted, will prove final only till the next aggression. Each period of waiting will be accompanied by monstrous military threats, hints of rockets, radioactive poisons, disease, torment, world suicide.' (Linebarger, *Psychological Warfare,* p.244)

[7] 'Here, too, there arises the question whether the same effect derived from this act when it is performed in a pseudo way and is heard by the other and taken as genuine, as when it is performed genuinely and sincerely.' (Adolf Reinbach, "The Apriori Foundation of Civil Law [1913]". Translated by John F. Crosby. *Alethia: An International Journal of Philosophy* volume 3 (1983), p.67. https://www.scribd.com/document/280304068/A-Priori-Foundations-of-Civil-Lay

[8] 'The sound psychological warfare operator will try to get enemy troops to believing that the enemy is not themselves but somebody else …' (Linebarger, *Psychological Warfare*, p.50)

[9] According to *Wikipedia*: 'The FBI and CDC authorized Iowa State University to destroy its anthrax archives in October 2001, which hampered the investigation. Thereafter, a major focus in the early years of the investigation was bioweapons expert Steven Hill, who was eventually

exonerated. Bruce Edwards Ivins, a scientist at the government's biodefense labs at Fort Detrick in Frederick Maryland, became a focus around April 4, 2005. On April 11, 2007, Ivins was put under periodic surveillance and an FBI document stated that he was “an extremely sensitive suspect in the 2001 anthrax attacks”. On July 29, 2008, Ivins died by suicide with an overdose of acetaminophen (paracetamol)’. (Accessed July 4, 2025)

[10] See BBC 2002. *Smallpox 2002: Silent Weapon*. Wall to Wall Television. https://www.youtube.com/watch?v=E_iifJyP4ZA

[11] See *KnowCOVID* https://knowcovid.info/timeline/ for a useful timeline.

[12] See *CNN*, *Avian Flu Fact Facts*(2002). https://edition.cnn.com/2013/08/23/health/avian-flu-fast-facts/index.html

[13] *Avian Flu: Contagious*. Journeyman Pictures, April, 2005. https://www.youtube.com/watch?v=HFdTtDDIQb4 *The Coming Pandemic*. Journeyman Pictures, Nov. 3, 2005.https://www.youtube.com/watch?v=wOy3ONFWGgQ

[14] ‘The first surprise comes when the prey moves into the web and realizes that the web’s strands contain powerful adhesive and the fibers are connected in such a way that they are capable of tremendous tensile strength. The true enemy becomes the fear and panic of the prey, as its struggles are exhausting and entangling, preventing the hapless insect from maintaining its resistance.’ (Steven C. Combs, “Sun-zi and the *Art of War*: The Rhetoric of Parsimony.” *Quarterly Journal of Speech*, vol.83, no.6. August (2000): pp.276-294.Combs, “Sun-zi and the *Art of War*: The Rhetoric of Parsimony”, p.290)

[15] The full reference is: ‘Lagrone, S. (2020). Timeline: Theodore Roosevelt COVID-19 Outbreak Investigation. Annapolis, MD: U.S. Naval Institute. Retrieved from: https://news.usni.org/2020/06/23/timeline-theodore-rooseveltcovid-19-outbreak-investigation ‘. According to the U.S. Department of Defense: ‘Over the course of the outbreak, 1,271 sailors (27% of the crew) tested positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by rRT-PCR testing. The authors found that working in confined spaces, enlisted rank, history of angiotensin converting enzyme inhibitor use, respiratory disease, and obese body mass index were associated with an increased risk of infection …. SARS-CoV-2 spread quickly among the Roosevelt's crew. Transmission was facilitated by close quarters and asymptomatic and pre-symptomatically infected crew members. Nearly half of those who tested positive for the virus never developed symptoms. These findings show that young, healthy working-age adults can play a role in the spread of SARS-CoV-2’ (DOD., “Navy Publishes Scientific Paper on USS Theodore Roosevelt COVID-19 Outbreak.” Navey Courtesy Story. U.S. Department of Defense. Nov. 17, 2002.https://www.defense.gov/News/Feature-Stories/Story/Article/2414271/navy-publishes-scientific-paper-on-uss-theodore-roosevelt-covid-19-outbreak/source/navy-publishes-scientific-paper-on-uss-theodore-roosevelt-covid-19-outbreak/). Kasper et al report that the crew member who died ‘died from Covid-19–related cardiovascular complications’ (Kasper, Matthew R. Jesse R. M.D. Geibe, Christine L. Sears, Asha J. Riegodedios, Tina Luse, Annette M. Von Thun, Michael B. McGinnis, Bruce L. Gillingham 2020. “An Outbreak of Covid-19 on an Aircraft Carrier.” *New England Journal of Medicine*, Vol. 383, No, 25 (2020, November 11): pp.2417-2426.) Author Info & Affiliationshttps://pmc.ncbi.nlm.nih.gov/articles/PMC7675688/pdf/NEJMoa2019375.pdf

p.5). No details are given of the medical history or pathologist report on the fatality. See also Stoddard et al ("COVID-19 isolation and containment strategies for ships: Lessons from the USS Theodore Roosevelt outbreak." *medRxiv preprint*. November 7, 2020. https://www.medrxiv.org/content/10.1101/2020.11.05.20226712v1.full.pdf2020).

[16] 'But if, through the narrative of a case in history, an abstract truth is to be demonstrated, then everything in the case bearing on the demonstration must be analysed in the most searching and complete manner; it must, to a certain extent, develop itself carefully before the eyes of the reader. The less effectually this is done the weaker will be the proof, and the more necessary it will be to supply the demonstrative proof which is wanting in a single case by a number of cases …' (Clausewitz, *On War*, p.159)

[17] WHO, "WHO brings countries together to test collective pandemic response." 'At a time when multilateralism is under pressure and preparedness is often framed through a national lens, Exercise Polaris reaffirmed that health is a global issue.' https://www.who.int/news/item/04-04-2025-who-brings-countries-together-to-test-collective-pandemic-response

[18] See Rhoda Wilson, "DARPA's request for information on computer modelling of disease outbreaks indicates the harmful covid response is the new normal." *Exposé*. June 4, 2025. https://expose-news.com/2025/06/04/darpas-request-for-information/

[19] See S.D. Wells, Wells, S.D. 2025. "EXERCISE 'PEGASUS' a pandemic pre-drill to prepare everyone for new plandemic virus, clot shots and lockdowns." *Natural News*. July 11, 2025. https://www.naturalnews.com/2025-07-11-exercise-pegasus-a-pandemic-pre-drill.html

[20] 'Source is the most important. If the source is open and acknowledged, the government issuing it is putting the propaganda on the record before the world, and must therefore issue the propaganda with a certain amount of dignity and with an eye to the future. If the source is faked, then it is important for the government or army to make sure that the faking is a good job, and that the propaganda cannot readily be traced back. Two very different techniques are employed. Open sources require responsible public officials, preferably men with international reputations, who will get the best effect from use of the name and facilities of the government. Use of an open source usually (but not always) implies belief of the disseminator in the veracity of his materials.' (Linebarger, *Psychological Warfare*, p.44)

[21] Hudon Institute think tank founded by Herman Kahn author of *On Thermonuclear War* (1960) arguing for the winnability of a nuclear war. Kahn is credited with popularizing f scenario planning and prediction, simulation games. Stanley Kubrick based the character of Dr Strangelove on Kahn. https://en.wikipedia.org/wiki/Herman_Kahn

[22] A Tribute to Senator Lieberman with the Release of the 2024 National Blueprint for Biodefense - Bipartisan Commission on Biodefense (biodefensecommission.org)

[23] https://biodefensecommission.org/reports/the-national-blueprint-for-biodefense/

[24] See Sergio Alloggio, "Death as an ideological stimulant: *Epitaphios* and *logos hegemonikos* through Nicole Loraux's *The Invention of Athens*." *African Yearbook of Rhetoric* 7 (2016-17): pp.103-112. file:///C:/Users/Dell%20User/Desktop/Texts/Alloggio%20epitaphios.pdf

[25] See *Rebuilding America's Defenses: Strategy, Forces and Resources* (September, 2000). https://archive.org/details/RebuildingAmericasDefenses

[26] '… how much the objective nature of War makes it a calculation of probabilities …. that from the outset there is a play of possibilities, probabilities, good and bad luck, which spreads about with all the coarse and fine threads of its web, and makes War of all branches of human activity the most like a gambling game.' (Clausewitz, *On War*, p.20)

[27] This phrase is from Linebarger, *Psychological Warfare*, p.1.
[28] Borrowed from Jacques Derrida, "No Apocalypse, Not Now: Full Speed Ahead, Seven Missiles, Seven Missives". In: *Psyche: Inventions of the Other, volume 1*. Edited by Peggy Kamuf and Elizabeth Rottenberg. Translated by Catherine Porter and Philip Lewis. California: Stanford University Press, 2007, pp.444-409
[29] See Matt Smith, "DARPA's Theory of Mind Warfare." *Doug Casey's International Man* (n.d.) https://internationalman.com/articles/darpas-theory-of-mind-warfare/
[30] 'Note that the propagandist tries to see things from the point of view of his audience.' (Linebarger, *Psychological Warfare*, p.7)
[31] The Commission stands in a lineage that includes the *The National Commission on Terrorist Attacks Upon the United States* (2002-2004) and *The President's Commission on the Assassination of President Kennedy* (1963-1964).
[32] See Bipartisan Commission on Biodefense, "Astrobiodefense: Biological Threats and the Next Frontier." May 2025. https://biodefensecommission.org/events/astrobiodefense-biological-threats-and-the-next-frontier/
[33] 'A people can be converted from one faith to the other if given the' choice between conversion and extermination, stubborn individuals being rooted out. To effect the initial conversion, participation in the public ceremonies and formal language of the new faith must be required". Sustained counterintelligence must remain on the alert against back sliders, but formal acceptance will become genuine acceptance if all public media of expression are denied the vanquished faith.' (Linebarger*, Psychological Warfare*, p.13)
[34] See "Blueprint for Tyranny: The Twenty-Year Construction of the COVID Crisis." *Lies are Unbekoming. Substack*, 28 June, 2025.
https://unbekoming.substack.com/p/blueprint-for-tyranny-the-twenty
[35] 'In one field only, psychological warfare, is there endless uncertainty as to the very nature of the operation.' (Linebarger, *Psychological Warfare*, p.1)
[36] From Clausewitz, *On War*, p.121.

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SAFE AND EFFECTIVE